

I. INTRODUCTION

Technological advances over the past several years have permitted greater productivity and accessibility, both in and outside the office. Examples of these new technological developments include widely available wireless internet access (WiFi); e-mail access through personal digital assistants (PDAs); cell phones that receive text messages, take photographs, and download information from the internet; and phone calls transmitted through Voice over Internet Protocol (VoIP). These new technologies have greatly increased the amount of information created and stored. In 2003, a study by the University of California at Berkeley's School of Information Management and Systems estimated that almost five exabytes of new information were produced in 2002.¹ Of that new information, the study estimated that instant messaging produced five billion messages a day, or 274 terabytes a year,² and e-mail produced globally about 400,000 terabytes of new information each year.³ In contrast, a 2008 study by the International Data Corporation indicates that the digital universe (all things created and stored digitally) in 2007 was about 281 billion gigabytes, or 281 exabytes.⁴ With a compound annual growth rate of almost 60%, the digital universe is projected to be nearly 1,800 exabytes in 2011, a ten-fold increase since 2006.⁵ This is an enormous amount of information to be managed, which, if not managed efficiently, can cost a company millions of dollars complying with discovery requests in the event of litigation.

While technology provides quick and easy access to enormous amounts of information, it is a massive task to manage this information. The management of information flow creates significant problems, not only in providing adequate security and access controls for privileged, confidential, and personally identifiable information, but also in preserving and accessing the information, either for business needs or to comply with discovery requests in litigation or in government audits. With the 2006 amendments to the Federal Rules of Civil Procedure for discovery of electronically stored information (ESI), along with new federal requirements for ESI management,⁶ the lack of proper information management can raise issues of spoliation in litigation, loss of privilege by the inadvertent disclosure of information, sanctions by a government agency for privacy violations of electronically retained information, or fines for failure to comply with security breach notification requirements.

Management of this information becomes a critical issue for businesses, not only on a day-to-day basis for use, but also for purposes of long term retention to meet business, legal, and financial obligations. There is also the

¹. PETER LYMAN & HAL R. VARIAN, HOW MUCH INFORMATION? 2003: EXECUTIVE SUMMARY 1 (2003), available at <http://www.sims.berkeley.edu/research/projects/how-much-info-2003/printable-report.pdf>. An exabyte is equivalent to "[a]ll words ever spoken by human beings." *Id.* at 4.

². *Id.* at 2.

³. *Id.*

⁴. JOHN F. GANTZ ET AL., INT'L DATA CORP., THE DIVERSE AND EXPLODING DIGITAL UNIVERSE: AN UPDATED FORECAST OF WORLDWIDE INFORMATION GROWTH THROUGH 2011 3 (2008), available at http://www.netlingo.com/more/Digital_Universe.pdf.

⁵. *Id.*

⁶. For example, sections 802 and 1102 of the Sarbanes-Oxley Act of 2002, 15 U.S.C. §§ 1512(c), 1519 (2006), and the Health Insurance Portability and Accountability Act (HIPAA), 42 U.S.C. § 1320d-2 (2000), impose specific records retention requirements on corporations.

corporate archive to consider—information which does not fulfill a legal or business need but is essential for historical purposes to a company. Many companies overlook the importance of retaining historical information, such as photographs, corporate newsletters, product packaging, or advertising campaigns. Much of this information is now stored in digital formats and may be lost in a short period of time without a plan for its retention.